

#### **[045] Abstract**

**[046]** The present invention relates to Cranberry seed oil derivatives derived by the reaction of dimethyl amino propyl amine and cold pressed Cranberry seed oil. This intermediate is subsequently reacted with sodium monochloroacetic acid to make a Cranberry betaine. The choice of cold pressed Cranberry seed oil as a raw material in the preparation of the compounds of the present invention is critical, since it has been found that the cold pressed Cranberry seed oil contains antioxidants, antimicrobial compounds and which when reacted with a DMAPA result in products that deliver said actives to the skin and hair, resulting in protection of the skin and hair from environmental factors such as acid rain, ozone attack and UV degradation.